CASE REPORT

Commentary

Unclear symptoms – fatal outcome

Urosepsis during the first months of life is not entirely uncommon and occurs most frequently in boys, mainly due to urogenital abnormalities (1). Posterior urethral valves, which only occur in boys, manifest themselves in different ways, and when detected prenatally a pronounced hydronephrosis is an indication for prenatal drainage (2). Postnatally, urosepsis may be the first symptom – if the boy’s weak urine stream has not already been alerted to. In certain cases the obstruction may be so slight that the condition is only discovered after several years when the child is referred because of urinary incontinence, possibly as late as in adulthood (3).

The current case history is a good example of the challenge that the critically ill infant may represent. Information regarding weak urine stream must trigger further diagnostic imaging. Ultrasound examination of the urinary tract will be able to indicate hydronephrosis and thickening of the bladder wall, if posterior urethral valves are present. However, ultrasound is a method which is dependent on the experience and skill of the person conducting the examination, and an indication of possible hydronephrosis requires that the patient be adequately hydrated. The diagnosis itself must be verified using voiding cystourethrogram (MCUG), one reason being that both a neurogenic and non-neurogenic bladder may give the same ultrasound findings (4).

The infant’s poor weight gain and general failure to thrive alone imply a need for thorough investigation. This symptom complex may be caused by an upper urinary tract infection, even though the young infant has no fever. The importance of urinalysis in all infants with unclear symptoms or findings cannot be stressed enough. This applies not only where a bacterial urinary tract infection is suspected, but also in conditions which directly or indirectly affect the renal tubules and/or renal interstitium. Knowledge not only about electrolytes, but also pH, amino acids (metabolic screening) and glucose can be crucial for further diagnosis.

To sum up, the case report underlines that information on weak urine stream must be acted upon using imaging, that general failure to thrive must always be investigated and that urinalysis is of great importance when conditions in infants are unclear.

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References

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